

**REMARKS FOR CARL SCHELLENBERG
ACTING EXECUTIVE DIRECTOR FOR
OPERATIONS
AFRO-AMERICAN HISTORY MONTH
FAA AUDITORIUM
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Thanks, Leon. It's a pleasure to be here to help kick off Black History Month. Joe Del Balzo wanted very much to be with you, but he had a family matter that he simply had to attend to.

We are fortunate to have General Davis as our featured speaker today, and I want to welcome him to the FAA. General, we're delighted you could be with us.

Not too long ago, it was fashionable for speakers at these occasions to express the hope that there would come a time when we could do away with celebrations designed to "set the record straight" on the achievements of Black Americans.

The theory was that once we raised the national awareness about the contributions that Black Americans have made to this country, we would no longer need special celebrations like this.

Well, we have come to realize that these times of observance are not just about setting the record straight. They also are about celebrating diversity and the richness this brings to the FAA and this country. And I think we'll always want to set aside a time to celebrate that.

But, let's be clear, we are here to learn as well. And, for many of us, we have some catching up to do. When some of us went to school, the textbooks we used did not adequately deal with the subject of Black Americans. In fact, in many cases, Black Americans were simply left out of the American history books altogether. So, in a sense, we've got to go back to school and fill in the gaps. And Black History Month gives us an opportunity to do that.

As part of my own re-education, I remember reading in the newspapers some time ago about the difficult times that General Davis went through growing up, at West Point and later on in his military career. It was an eye-opener for me. It helped me appreciate the enormous courage, the sacrifice and the obstacles that many have had to overcome to make it in our society.

It's ironic that textbooks have failed to acknowledge the achievements of Black Americans. In many cases, the contributions they made were not only to their own culture but to our common intellectual heritage.

This country owes a special debt of gratitude to our Historically Black Colleges and Universities for recording these achievements, providing Black Americans the opportunity to get an education and keeping hope alive.

This year's theme for Black History Month is "Afro-American Scholars: Leaders, Activists, and Writers." It is sad to think that many from the past had to labor in relative obscurity without getting the recognition they deserved.

But, at the same time, it is heartening to note that today the names of Marian Wright Edelman, Benjamin Hooks, Toni Morrison, Colin Powell, Alice Walker, Vernon Jordan, Maya Angelou, and many others are in the forefront of American education, business, government and letters.

It must have been particularly satisfying for older Black Americans to witness the turn of events that have been in the news over the last couple of weeks. First, to see a Black Woman selected to write and deliver a poem at the President's swearing-in ceremony. Then, just a few days ago, to see the tremendous national tribute and outpouring of sentiment for Justice Thurgood Marshall.

As I look around this audience here today, I am encouraged to see so many people of diverse backgrounds, cultures and ethnic heritages. It underscores the point once again that Black History Month is not just for Blacks. It is for all of us. It provides all of us a great opportunity to expand our knowledge and learn to appreciate one another better.

So, take advantage of the many educational and cultural opportunities available during the month. I am sure you will find some eye-openers of your own along the way.

And, finally, thanks for coming down here today. It's great to see such a strong turnout.

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Good Morning.

It's always a pleasure to escape the confines of Washington...especially in the super-heated days of August...and listen to ideas about our industry from other than a United States perspective. With so many pressing problems facing aviation and aerospace in our country, other viewpoints and concerns tend to be crowded out in the competition to be heard. It's especially interesting to hear the views of my fellow panelists, because while privatization is not an issue which has been high on the FAA agenda, the subject of airports is a continuing priority for us. For as an agency, we are well aware of the link between airport capacity and the financial health of the airline industry.

As many of you know, one of the first acts of the Clinton administration was the appointment of a 15 member commission to study the competitiveness of our domestic airline industry. The Commission is now drafting its final report, and some of its tentative recommendations were discussed at an open session last month. The commission is expected to suggest, for instance, some liberalization in the rules governing foreign ownership of our domestic airlines as part of an overall effort to promote more open competition on international routes.

The eventual fate of the Commission's recommendations rests, of course, with the Department of Transportation, the White House and with the Congress. But all of us in the industry know that limited capacity is a constraint on competition. So, in the long run, profitability...even survivability...will depend on expanded capacity...in the airspace...and at the airports.

Growth in capacity is especially vital to the health of international commercial aviation. Our own forecast and tracking data indicate that while domestic air travel is relatively flat this year, international travel is showing its expected growth. It may even exceed our annual forecast a bit. The gains are largely in trans-Atlantic traffic, with the Pacific routes experiencing some softness...no doubt reflecting the downturn in that region's economy. But whatever the short-term effects of today's economic condition, we know that we must all prepare for long-term growth. For while some of our forecast anticipate significant changes in the structure of our industry, none of our forecasts...not even the most pessimistic...predicts a mature or declining industry.

Commercial aviation is still in a growth phase, and to support this growth the FAA is following a three-point strategy for expanding capacity and increasing system efficiency. Today I'd like to discuss each of these initiatives briefly.

The first of these is the modernization of the U.S. airspace system -- a multi-billion dollar project which is now in the final few years before its completion...a feat which has not been made easier by the fact that essential technology has continued to evolve rapidly, even as we proceeded with our planning and installation. It's an interesting fact that while the FAA first began to think about satellite navigation in the late 1960s, the initial version of our massive modernization plan refers to satellites only in the context of weather surveillance. The development of navigation satellite technology has occurred since we began to modernize, and has forced a major reformulation in our planning. The second effort to expand capacity involves the funding of improvements in airport infrastructure. And the third is the search for ways to deal with the environmental problems which affect the communities surrounding our airports and which can provoke strong opposition to airport expansion.

Let me first review, for you, the FAA's project to modernize our air traffic control system. Most of you know, I'm sure, that the FAA is in the eleventh year of a massive program to totally replace a technology which was originally acquired between 1965 and 1975. Although it was modern at the time, most of this equipment is now very outdated and increasingly less capable of managing the volumes of traffic that we have today...and expect for the future.

At the core of our modernization program is the Advanced Automation System...based upon one of the most powerful and complex real-time computer systems ever built. Linked to this computer system is a newly designed work station for air traffic controllers which provides full color displays, integrated communication, state-of-the-art processors, and highly sophisticated new software. With this new system, controllers will be able to dynamically reconfigure the airspace almost instantly...adjusting the workload, rerouting aircraft around bad weather and providing a greater margin of safety. Aircraft will move through even the most crowded airspace following routes selected to minimize delay and save fuel...routes flexible enough to be changed mid-course, if necessary, by controllers and pilots communicating by means of onboard computers.

Terminal Air Traffic Control Automation--TATCA--is another major improvement that will be available by the end of the decade. Once TATCA is in place, controllers will have top-of-descent, approach spacing, and sequencing aids to handle higher levels of traffic in the terminal area with greater efficiency and safety. The payoff from TATCA will be additional capacity at those airports which today are choked with congestion. One of the key components of TATCA was developed in collaboration with NASA, and was demonstrated for the aviation press just a couple of weeks ago at NASA's Ames Research Center.

Known by the acronym CTAS, it looks at planes as they come in from all directions while they are still about two to three hundred miles from the airport...and finds the most efficient way to sequence the arriving traffic. As incoming planes converge on the aerial "gate" about forty miles out, CTAS generates computer graphics which display the space and time relationships among all aircraft...and provides controllers with precise, fuel-efficient descent and vectoring advisories for the spacing and sequencing of planes during final approach. CTAS has been tested -- since last May -- at Stapleton International in Denver and at the Longmont, Colorado air route traffic control center. Soon testing will begin at Dallas/Fort Worth. Once the system is brought on line at just 12 selected airports, we estimate that, by the year 2000, it will save airlines nearly 600 million dollars in operating costs and reduced delays.

The bottom line benefits expected from CTAS will be multiplied many fold as the FAA begins to employ all of its new technology. The eventual savings to carriers will far exceed the cost of our investment in modernization. Aircraft manufacturers tell us that it costs one million dollars a year to delay a 747-400 by just one minute each operating hour. The engineers at Boeing estimate that the extra cost of congestion, delay, and inefficient routing is in the range of 10 billion dollars, worldwide.

So FAA modernization is one public sector program which is certain to be of immense and measurable benefit to private sector profitability. It's hard to over-estimate the magnitude of these benefits, or to exaggerate the force of the technological and economic imperatives which have powered the emergence of new concepts in air traffic control. Perhaps the most dramatic of all has been the unexpectedly rapid development of satellite navigation and surveillance. The suddenness with which it has become both feasible and available has been a surprise to us all. We still have not had time to explore the implications fully or solve all the problems. But there is not doubt that this technology has radically recast the future of air traffic control.

We are committed, as an Agency, to bring the benefits of GNSS to users as quickly as we can...and to achieve an orderly, staged deployment of the technology consistent with our over-riding responsibilities for aviation safety. In late spring, we announced that we have approved the supplemental use of the U.S. Global Positioning System, the GPS, for all phases of flight, including non-precision approaches to airports. And sometime this fall, GPS receivers meeting FAA certification standards are expected to be on the market. Another milestone event...one crucial for all that is to follow...also takes place late this fall when the full GPS constellation becomes operational. At that time, all 24 satellites -- 21 active and 3 "hot spares" -- will be functioning in their assigned orbits.

The first country to test GPS on a national scale is the island nation of Fiji. Fiji has an ideal environment in which to evaluate the technology because of the vast areas of low-density airspace. Fiji's 300 islands are spread over nearly 400 thousand square miles with 19 airfields serviced by only five navigation aids. A typical flight crosses as much as 150 miles of ocean in visibilities of less than 5 miles...and all without navigational guidance of any kind.

The FAA is working closely with the Fiji CAA to set up procedures for using and evaluating GPS in all en route and terminal operations. What we learn from this six month experiment will help us better understand the capability and reliability of a satellite-based system in actual day-to-day operation. If our expectations are realized, GNSS will allow the expansion of commercial aviation into sparsely served areas of the world without requiring the enormous infrastructure investment which would burden the economies of poorer nations. And we already know that GNSS will allow the expansion of lucrative trans-oceanic air traffic by permitting less separation among planes without in any way compromising air safety.

Our second major initiative to enhance capacity centers on the nation's airports. President Clinton and Secretary Pena have made it clear that they are determined to see that airports get the resources they need to keep pace with the demands of a growing economy and the advances in aviation technology...even in this period of fiscal restraint.

An important funding mechanism is the authority granted to commercial service airports to impose a passenger facility charge of up to 3 dollars per passenger. The revenue produced by these charges...or PFCs...is intended to improve capacity, security and safety...to reduce noise...and to promote competitiveness among airlines. In the past two years, the FAA has approved over 120 applications with a collection value approaching seven billion dollars. PFC's have funded over a thousand projects that have enabled airports to add scores of new aprons, taxiways and runways...to improve their security systems...and to install people movers and build access roads. And these funds have been used, as they were in Denver, to pay both the principal and interest on airport development bonds. When the Denver Airport opens this December, it will be the first major new airport to be built in the United States in over two decades.

The passenger facility charge has also been used to expand capacity specifically for international service. This spring, flights began operating from the new international terminal at Chicago's O'Hare Airport. Financed in part by PFCs, the facility provides 21 gates...more than twice as many available in the old terminal.

Another exciting possibility for adding airport capacity is the result of the military downsizing which is now underway. There are dozens of military airfields throughout the United States which have been deactivated. Almost all of them have long runways. We're looking at these closed military airfields as a major source of new capacity for the civil aviation sector. Those that we've converted so far have been very successful. Probably the best example is Orlando International Airport. Originally McCoy Air Force Base, Orlando International now serves some 21 millions passengers a year...most of them headed for Disney World. It's grown, in a very short time, to one of the top 20 airports in the U.S.

The United States has also seen a growth in the popularity of smaller airports...similar to the trend in Europe which has seen increasing traffic at Manchester, Amsterdam, Lugano and other similar facilities which are more user-friendly and far less congested than the sprawling complexes of Heathrow, Charles de Gaulle, and Frankfurt.

One of the bright spots in an otherwise depressed domestic business has been the success of Southwest Airlines, which has been able to make a profit operating from smaller, often under-utilized airports. In some areas, private bus operators have introduced shuttle service to provide transportation for bargain-seeking passengers living some distance from airports served by Southwest...passengers willing to go out of their way to escape the hassle and higher fares of major hub operations.

This is an impressive example of creative market solutions to the problem of capacity. It also underscores the fact that the problem of airport congestion has reached critical proportions at only two dozen or so of our major airports. Some airports still have excess capacity and plenty of room for future growth. This is fortunate, because building new airports and expanding old ones almost always encounters vigorous opposition from surrounding communities. We are constantly responding to questions and complaints about the environmental and economic impact of new projects. Dealing fairly and effectively with legitimate concerns is the objective of our third broad initiative to create capacity.

Any proposal for new construction requires an environmental impact study, and noise is nearly always at the top of the list of concerns. At the FAA, we're making extensive use of mathematical modeling to assess the impact of noise on the area immediately surrounding an airport. One new and interesting tool illustrates how we are finding peaceful applications for ideas borrowed from the military. We've modified a mathematical model which was developed originally to plan tactical maneuvers at sea and in the air. It looks for the best way to sneak a submarine past a fleet of hostile destroyers or to get a jet fighter to a target through an anti-aircraft barrage. In our appropriation of the technique, we simply substitute people for flak. This version maps out the route over populated areas which enables a plane to dodge the largest concentrations of inhabitants.

I mention this to show how very far we've ventured in our search for workable solutions. But noise isn't the only environmental concern which our agency is addressing. Pollution is another. And we've found many uses for a mathematical model designed to assess air quality at airports and to map the concentrations of emissions at various locations. The model has been used extensively in land use planning and the preparation of environmental impact statements for airports throughout the United States and in 15 other countries. We always welcome these opportunities to collaborate. Because it is from our collective involvement that we add to our ability to find rational resolutions to the many formidable environmental challenges to airport expansion today.

The sharing of knowledge about the environmental impact of aviation is becoming a truly international exchange as the problem becomes worldwide. No single country is exempt...just as no single country has a monopoly on technical expertise. The free market of ideas is as important to the future of world aviation as is an economic market in which all carriers are free to compete. This is the real significance of meetings such as the International Air Transportation Forum. It's an opportunity to put competing ideas into play and test their value. For as aviation evolves toward a globally integrated system, there will be less and less room for go-it-alone approaches. We have no choice but to go the way together.

Thank you.